



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8, MONTANA OFFICE
FEDERAL BUILDING, 10 W. 15th STREET, SUITE 3200
HELENA, MONTANA 59626

Ref: 8MO

May 24, 2018

Dr. Gerry Nolan, Superintendent
Anaconda School District 10
1410 W. Park Avenue
Ecological Services
Anaconda, Montana 59711

Dear Gerry:

At your request, the U.S. Environmental Protection Agency (EPA) conducted sampling at the Lincoln School, Moodry School, Anaconda Junior/Senior High School, and Memorial Gym buildings on March 24 through 28, 2018 to determine if interior dust had elevated concentrations of arsenic and lead that might pose a risk to human health. At the request of Anaconda – Deer Lodge County (ADLC), the Head Start School was added to the list to be sampled. Samples were collected by EPA contractors using a high volume small surface sampler for dust from interior floors, including floor mats placed at entrance ways, and a hand-held micro-vacuum from other surfaces. These samples were shipped to EPA-certified laboratories for arsenic and lead analysis.

The attached data summary report (DSR) presents the sampling locations and results, and results of data validation and usability reviews to verify that the analytical results met EPA's quality assurance/quality control requirements as specified in the quality assurance project plan (QAPP). To aid you in understanding the analytical results, we are summarizing the following conclusions we have drawn from the DSR:

- All floor dust samples collected from the five buildings were below the 250 milligrams per kilogram (mg/kg) arsenic and 400 mg/kg lead cleanup action levels for soils and dust established for the Anaconda Smelter site. Figure 1 provides the floor mat results for each building, with the cleanup levels displayed for reference. The results for floor dust and surface dust range from 3.7 to 37.2 mg/kg for arsenic, and 22.8 mg/kg to 264 mg/kg for lead.
- Figure 2 is a graph of arsenic versus lead concentrations. The single high value for lead of 264 mg/kg at Memorial Gym is still well below the 400 mg/kg cleanup level and corresponds to a low arsenic level of 28.9 mg/kg, suggesting the source of lead is not smelter-related, but may be from another lead source such as paint.
- At the request of ADLC, the sampling team wore personal air monitoring pumps during sample to obtain data on the presence of arsenic and lead in the ambient air. Sample results for arsenic ranged for 0.15 to 0.63 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), and 0.024



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to 1.34 $\mu\text{g}/\text{m}^3$ for lead. These are far below the permissible exposure levels set by the Occupational Safety and Health Administration for arsenic (10 $\mu\text{g}/\text{m}^3$) and lead (50 $\mu\text{g}/\text{m}^3$).

- The sampling team followed the procedure established by the American Section of the International Association for Testing Materials (ASTM), ASTM D 7144-05a, *Standard Practice for Collection of Surface Dust by Micro-Vacuum Sampling for Subsequent Metals Determination*. Upon sample receipt by the analytical laboratory, it was determined that there was insufficient mass to meet reporting quantity limits. Therefore, EPA decided not to have these samples analyzed.

All sampling results are below action levels. At your request, EPA still intends to proceed with the sampling of Dwyer School and the ASD10 Administration building in early June to give the Anaconda School District confidence that all buildings are clean and ready for use. We also plan to re-sample historic dust (e.g., above light fixtures, boiler pipes, and other locations with heavy visual dust) using the micro-vacuum at select locations in the five school buildings sampled at the request of ADLC. Based on the very low levels we have seen in the floor mat results, we do not plan to conduct additional floor mat sampling. We have modified the QAPP to deviate from the ASTM protocol to collect sufficient dust mass. Because of the low results, additional personal air monitoring will not be performed.

If you have any questions, please give me a call.

Sincerely,



Charlie Coleman
Anaconda Project Manager

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